

State Natural Areas within the Fox River Headwaters Ecosystem

Excerpted from longer descriptions prepared by State Natural Areas staff

Bass Lake Fen: Features a 20-acre fen located on the undeveloped shore of Bass Lake. The fen is exceptionally diverse with many small springs, openings, and ponds providing a calcium-rich habitat that supports 126 species of plants. Of note is the state-threatened false asphodel (*Tofieldia glutinosa*), and two special concern species. To the east, the fen grades into sedge meadow and the two communities are bordered on the north by tamarack swamp and on the south by shrub carr. The five-acre Bass Lake is a clear fertile lake, some 27 feet deep, with a sandy marl bottom. The lake has a good warm water fishery and is an important waterfowl area. Sandhill cranes, which nest nearby, use the area extensively. Bass Lake is owned by the DNR and was designated a State Natural Area in 1983.

Berlin Fen: Berlin Fen contains two mound fens, the smaller on the south side near the abandoned railroad trail and the larger covering nearly the entire northern portion of the site. The mounds are dome-shaped piles of wet calcareous peat and have unique combinations of plants. The larger mound is dominated by shrubby cinquefoil and chairmaker's rush while the smaller mound is dominated by prairie grasses. Throughout the main mounds are areas of marl rivulets and pools, which harbor a very unusual flora including special concern species. Preliminary studies suggest that sedge wren, common yellowthroat, and savanna and clay-colored sparrows breed here. Berlin Fen is owned by the DNR and was designated a State Natural Area in 1986.

Caves Creek (within Upper Fox Headwaters SNA): Caves Creek contains the headwaters of Caves Creek with spring seeps and runs, a 2-acre spring pond, sedge meadow and tamarack swamp, and oak barrens. The spring seeps are floristically rich and are surrounded by a diversity of wetlands. The barrens lies on a south-facing slope and contains a good diversity of prairie species including little blue-stem, June grass, flowering spurge, and bird's-foot violet. A state endangered species, western slender glass lizard (*Ophisaurus attenuatus*), has been found at the site.

Chaffee Creek (within Upper Fox Headwaters SNA): Upper Chaffee Creek Meadow contains a wetland complex of fen, wet-mesic and wet prairie with over 100 native plant species present. Running through the site is Chaffee Creek. The creek valley varies between very wet sedge meadow through fen-like areas along the gentle north slope of the creek and grading to wet-mesic prairie. Grasses include big and little blue-stem, blue-joint grass, and slender wheat grass. Featured forbs are marsh pea, Michigan lily, western sunflower, pale-spike lobelia, Kalm's lobelia, grass-of-parnassus, marsh fern, and swamp lousewort.

Comstock Bog-Meadow: Lying within a 1000-acre natural basin in the glaciated Central Plain, Comstock Bog-Meadow features a large, quaking sedge meadow marsh with a high diversity of unusual plants. The undisturbed marsh is permanently wet and relatively free of water fluctuations. The south end lies on a drainage divide and is dominated by narrow leaved sedges with many acid bog plants occurring on the quaking, rhizomatous mat. Of particular interest is the unique assemblage of plants with many characteristic calcareous wetland species growing in association with bog species. Northward and westward the species composition changes to more closely resemble a sedge meadow. The marsh is used by a variety of rare breeding bird species, small mammals, muskrat, mink, reptiles and amphibians.

Sandhill cranes nest in the marsh and use the area as a fall staging site. In 1851, the original land surveyors described the area as a wet, quaking marsh, “over which we crossed with not a little danger to our lives.” Comstock Bog-Meadow is owned by the DNR and was designated a State Natural Area in 1975.

Fountain Creek Wet Prairie: Fountain Creek Wet Prairie is a large wet prairie, a very rare community in Wisconsin. The site features a high quality low prairie, which tapers to a nearly pure stand of prairie cordgrass. Because the area is located within the Grand River Marsh Wildlife Area, it is used by a large number of geese, sandhill cranes, great blue herons, and two species of concern: the northern harrier and bobolink. The wet prairie soils are easily compacted and vegetation fragile – please walk softly. Fountain Creek Wet Prairie is owned by the DNR and was designated a State Natural Area in 1972.

Germania Wet Prairie (within Germania Marsh Wildlife Area): Situated on the terraces above the Mecedon River is Germania Wet Prairie, a diverse wet to wet-mesic prairie with a showy flora and some sedge meadow and fen affinities. The natural area has had little to no previous disturbance such as grazing, which is a common occurrence in the surrounding area. Grasses include prairie cord grass, blue-joint grass, and slender wheat grass. Herbaceous plants include wild bergamot, prairie blazing-star, mountain mint, swamp thistle, Michigan lily, marsh bellflower, downy phlox, boneset, tall meadow-rue, pale-spike lobelia, and royal fern.

Koro Prairie: Koro Prairie features a stretch of high-quality mesic prairie with many species of native prairie plants. Dominated by big bluestem, this site contains other common mesic prairie species. This remnant is especially noteworthy because of its location at the northeastern edge of the prairie-oak savanna region in Wisconsin. The site runs along an abandoned railroad right-of-way and frequent fires sparked by the trains helped maintain the fire-adapted prairie vegetation. Koro Prairie is owned by Winnebago County and was designated a State Natural Area in 1990.

Lawrence Creek: Lawrence Creek is a cold, hard water trout stream with an excellent stream flora and fauna and the designated portion constitutes the main spawning area for a large reproducing population of brook trout. Originating in ground moraine about one and a half miles upstream, the creek is internationally famous for research on brook trout ecology, life history, and management. Rare plant species include the state-endangered brook grass (*Catabrosa aquatica*), and three special concern species. Lawrence Creek is owned by the DNR and was designated a State Natural Area in 1968.

Lunch Creek Wetlands: Lunch Creek Wetlands features one of the most diverse and species rich sedge meadows in Wisconsin situated within a mainly undisturbed watershed, an uncommon occurrence in Wisconsin. This large wetland complex is free of exotic species and dominated by fen and sedge meadow communities containing a total of 115 plant species. Wetland air photos show patterning—a rare phenomenon seen only at two other natural areas in Wisconsin—Cedarburg Bog and Bogus Swamp. The patterning is evident on the ground where high and low areas often show dramatic differences in plant species presence with wire grass sedges found in lower “impoundment” areas and a forb dominated sedge meadow directly adjacent to it. A fen-like meadow emanates from the uplands and upland islands surrounding the lower areas. The area provides ideal habitat for grassland and wetland birds. Over 5,000 sandhill cranes roost here in October and early November. Lunch Creek Wetlands is owned by the DNR and was designated a State Natural Area in 2000.

Muir Park: Ennis Lake is a 30-acre kettle lake occupying a marshy pocket in ground moraine. The seepage lake is spring fed with a marl bottom and a maximum depth of 30 feet. The surrounding vegetation is diverse and includes a rich calcareous fen that lies along an outlet stream, sedge meadow, and open bog, northern wet forest dominated by tamarack, southern dry forest, oak opening, and wet-

mesic prairie. The area was settled in 1849 by the Ennis and Muir families and was the boyhood home of John Muir, founder of the Sierra Club, who admired the natural beauty of the area. Muir Park is owned by Marquette County and was designated a State Natural Area in 1972.

Observatory Hill: The highest point in Marquette County is Observatory Hill, an isolated outcropping of porphyritic rhyolite, an igneous rock embedded with feldspar crystals. The hill, rising 300 feet above the surrounding landscape, has long been known by naturalists and was a favorite childhood haunt of John Muir who lived nearby. Recently, scientists have discovered the existence of petroglyphs on the hill's rock outcroppings, which may be part of a larger prehistoric petroform found in Marquette County. The slopes are covered with a southern dry forest community dominated by red and white oak, basswood and shagbark hickory and much of the area is now being restored to oak savanna – an imperiled vegetation community in Wisconsin. Near the top of the hill, bedrock is exposed or close to the surface creating acidic conditions where a specialized glade community has developed. Red cedar dominates the glade and the thin soils support a sparse ground cover of mosses, ferns, and lichens. Two state-threatened species, are also found on the site. Observatory Hill is owned by the DNR and was designated a State Natural Area in 1989.

Page Creek Marsh: Located in the central sands of Wisconsin, Page Creek Marsh is a large wetland preserve that supports a rich diversity of plants, rare meadow birds, and waterfowl. Dominant plant communities are northern and southern sedge meadow, and sandy oak savanna. Also present are fens, wet-mesic prairie, bog, and seepage lakes. Page Creek winds northwest near the west edge of the marsh through gently rolling farmland enhanced by remnants of native prairie and savanna. Page Creek Marsh is of particular value as a staging area for sandhill cranes during their fall migration. Luxuriant with emergent aquatic plants, the secure, deep-water habitat of the marsh provides cover for large numbers of birds every season. Numerous rare plants and animals are found here. Page Creek Marsh is owned by the DNR and was designated a State Natural Area in 1996.

Princeton Prairie: Located in an extensive basin where the meandering White and Puchyan Rivers empty into the Fox River, Princeton Prairie features a high quality wetland complex with numerous rare plants and animals. The site contains a diversity of wetland communities with southern sedge meadow, wet-mesic prairie, and open marsh. A low wet-prairie-marsh-sedge meadow complex can be found at the edge of the Puchyan River wetlands and contains a rich diversity of species. The area is also important waterfowl breeding habitat. Princeton Prairie is owned by the DNR and was designated a State Natural Area in 2002.

Puchyan Prairie: Puchyan Prairie features a large wet-mesic prairie, marsh, and sedge meadow complex at the edge of extensive wetlands bordering the Puchyan River. The prairie is particularly diverse and includes a large population of prairie parsley, a state-threatened plant. Toward the Puchyan River the vegetation grades into an extensive mosaic of undisturbed shallow marsh of cattail-bulrush, sedge meadow dominated by tussock sedge and bluejoint grass, and a wooded island dominated by large black and bur oaks with hazelnut and Pennsylvania sedge. Numerous rare animals are found here. Puchyan Prairie is owned by the DNR and was designated a State Natural Area in 1981.

Silver Lake: Silver Lake is an approved SNA project area with no land acquisition to date. When lands are purchased from a willing seller, it will be added to the official list of SNAs. The project area contains a shallow 52-acre lake with widely fluctuating water levels that provides one of the finest areas for Atlantic coastal plain disjuncts. These coastal plain disjuncts are plant species more commonly found along the Atlantic coast and are thus considered “disjunct” or separated from their home range. Located within the sandy soils of the terminal moraine, the 10-foot deep seepage lake contains other rare plants including Robbins’ spike-rush and the only known Wisconsin population of the state-endangered dwarf umbrella-sedge. Surrounding the lake is a 40-foot high sandy ridge extending west into the lake. This

area harbors a high quality oak savanna dominated by black oak with some red, white, and bur oak. The site contains an unusually good native prairie and savanna flora with over 80 species.

Snake Creek Fen: Features a high-quality calcareous fen and associated springs located within a large wetland complex in the Snake Creek corridor. The prairie fen is characterized by saturated soil and is dominated by prairie grasses and forbs along with several indicator fen species. Included within the natural area is a wet prairie, southern sedge meadow, and two depressions dominated by sedges and rare plants. Springs emanating from the depressions bring cold, alkaline water to the surface where calcium and magnesium precipitates to form small marl flats. Numerous rare plants are found here including three state-threatened species and four special concern species. Rare birds include yellow rail and Le Conte's sparrow. Snake Creek Fen is owned by the DNR and was designated a State Natural Area in 1998.

Summerton Bog: Summerton Bog is a highly diverse complex of low meadow, bog, fen, tamarack, and shrub communities. Located in the southeastern corner is a five-acre glacial till island wooded with red and white oaks. On the western flank of the island is a calcareous fen. Its calcium-rich waters have allowed an unusual assemblage of plants to thrive including typical fen species. Forested communities are mostly dominated by tamarack with a few black spruce. Nesting birds include sandhill crane, bobolink, sedge wren, Nashville warbler, and veery. Of note is the presence of nine species of orchid and the pickerel frog, a species of special concern in Wisconsin. Prescribed burns and brushing are conducted to maintain sedge meadow and fen community vigor. Summerton Bog is owned by the Nature Conservancy and was designated a State Natural Area in 1966.

White River Prairie/Tamaracks (within White River Wildlife Area): White River Prairie/Tamaracks contains one of the largest tamarack bogs and one of the largest and least disturbed wet prairie remaining in Wisconsin. The tamarack bog contains a dense canopy of tamarack with an understory dominated by sphagnum moss with a sparse willow and dogwood component. Ground cover consists of many northern plant species such as yellow bluebead lily and three-leaved gold-thread. The low, wet prairie contains an excellent flora with some fen aspects and is dominated by a great diversity of native species, none of which occupy more than 10% of any area. Some plants more typical of fens include sweet grass, shrubby cinquefoil, and boneset. Grasses present are big blue-stem, blue-joint grass, and prairie cord grass. Showy forbs include prairie blazing-star, Michigan lily, narrow-leaved loosestrife, wild bergamot, swamp milkweed, swamp saxifrage, spiderwort, culver's-root, golden alexanders, northern bedstraw, and hoary vervain. Scattered around are small upland black oak "islands" and small ponds, which add diversity to the site. The prairie harbors a substantial population of the state-threatened Henslow's sparrow (*Ammodramus henslowii*).

White River Sedge Meadow (within White River Marsh Wildlife Area): White River Sedge Meadow features the largest southern sedge meadow in Wisconsin, and contains a full variety of environmental gradients. The wetland complex contains a deep marsh with cat-tails and tussock sedge and contains a diversity of emergent aquatic species to the south. Because of its size, White River Sedge Meadow has been identified as the best opportunity within Wisconsin to manage wet meadow birds, including least bittern (*Ixobrychus exilis*), American bittern (*Botaurus lentiginosus*), sedge wren (*Cistothorus platensis*), grasshopper sparrow (*Ammodramus savannarum*), and Henslow's sparrow (*Ammodramus henslowii*). Thousands of sandhill cranes stage here every fall before their migration south. Scattered along the White River are patches of floodplain forest, which harbor rare birds including red-shouldered hawk (*Buteo lineatus*), cerulean warbler (*Dendroica cerulea*), and Acadian flycatcher (*Empidonax virescens*). Black terns have previously nested here. Other breeding birds include yellow-billed cuckoo (*Coccyzus americanus*), red-headed woodpecker (*Melanerpes erythrocephalus*), veery, prothonotary warbler, American redstart, and northern oriole.

Zinke Lake (within Upper Fox Headwaters SNA): a small hard water spring lake with a tamarack-dominated shore. The water is deep, clear, and cold with limited aquatic vegetation that includes common horsetail, common pondweed, chara, and water milfoil. The spring outlet has a soft sandy bottom and contains white water crowfoot. Other plants include marsh-marigold, lousewort, cow parsnip, ironweed, bulbet water-hemlock, showy goldenrod, and Missouri goldenrod. The lake's outlet stream is also used by brook trout for spawning.

